

DOCKET: CU-3406

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Cheol-Ho Choi et al)
SERIAL NO: 10/712,948) Group Art Unit: 3744
FILED: November 13, 2003) Examiner: William E. Tapolcai
TITLE: ICE MAKING MACHINE

AMENDED CLAIMS

1. (original) An ice making machine comprising a main body and an auxiliary table which is separable from the main body,

said main body comprising: a freezing unit for making ice pieces by freezing water; a cooling system connected to the freezing unit; an ice bin for storing ice pieces made by the freezing unit; a first water supply pipe for supplying water to the freezing unit; and a first drain pipe for discharging water remaining unfrozen in the freezing unit,

said auxiliary table comprising: a feed water receptacle and a drain receptacle, both having space for containing a predetermined level of water; a second water supply pipe selectively connected to the first water supply pipe to supply water contained in the feed water receptacle to the freezing unit; and a second drain pipe selectively connected to the first drain pipe to direct water discharged from the freezing unit to flow to the drain receptacle,

wherein the first water supply pipe and first drain pipe of said main body can be selectively and respectively connected to an external water line for supplying water and an external drainage for discharge of water remaining unfrozen in the freezing unit.

2. (original) The ice making machine according to claim 1, wherein said feed water receptacle and said drain receptacle can be separated from said auxiliary table.

3. (original) The ice making machine according to claim 1, further including:

a water supply pump for forcing water contained in the feed water receptacle to flow into the freezing unit;

a flow sensor for detecting the flow of water being supplied to the freezing unit; and

a controller for controlling the water supply pump in response to a signal from the flow sensor.

4. (original) The ice making machine according to claim 3, further including a water supply valve provided between the water supply pump and the feed water receptacle to selectively block the flow of water which is being supplied from the feed water receptacle.

5. (original) The ice making machine according to claim 1, further including a water purifier provided between the freezing unit and the feed water receptacle.

6. (original) The ice making machine according to claim 5, further including a sterilizing light provided on the water flow path between the freezing unit and the water purifier.

7. (original) The ice making machine according to claim 1, wherein said freezing unit includes:

an evaporation tube connected to the cooling system;

a base frame having a plurality of freezing cells to be filled with water and pivotably mounted in the main body;

a freezing plate having freezing fingers for dipping into the water supplied to the freezing cells to form ice pieces therearound; and

a drain leading path formed at one side of the base frame,

said base frame being capable of pivoting and tilting to one side so that water remaining unfrozen in the freezing cells can be discharged to the drain receptacle along the drain leading path.

8. (original) The ice making machine according to claim 7, providing a drain leading means at one side of the ice bin to receive water flowing along the drain leading path and delivering the water to the drain receptacle.

9. (original) The ice making machine according to claim 8, wherein said drain leading means includes a tube section connected to the drain receptacle and a diverging section for leading the water flowing down from the drain leading member to the tube section.

10. (original) The ice making machine according to claim 1, wherein said ice bin has a connection pipe therein to be connected to the drain receptacle so that the water melted in the ice bin can flow into the drain receptacle through the connection pipe.

11. (currently amended) An ice making machine comprising:

a housing partitioned into an upper chamber and a lower chamber;

a freezing unit ~~received in~~ disposed in the upper chamber of the housing to
make pieces of ice by freezing water;

a cooling system connected to the freezing unit;

an ice bin for storing the ice pieces made by the freezing unit;

a feed water receptacle received in the housing to supply water stored
therein to the freezing unit; and

a drain receptacle received in the housing to store water that remains unfrozen
and is discharged from the freezing unit;

wherein the upper chamber comprises a first water supply pipe for supplying
water to the freezing unit; and a first drain pipe for discharging water remaining
unfrozen in the freezing unit, and

the lower chamber comprises a second water supply pipe selectively
connected to the first water supply pipe to supply water contained in the feed water
receptacle to the freezing unit; and a second drain pipe selectively connected to the
first drain pipe to direct water discharged from the freezing unit to flow to the drain

receptacle.

12. (original) The ice making machine according to claim 11, wherein said feed water receptacle and said drain receptacle can be separated from the housing.

13. (original) The ice making machine according to claim 11, further including:

a water supply pump for forcing water contained in the feed water receptacle to flow into the freezing unit;

a flow sensor for detecting the flow of water being supplied to the freezing unit; and

a controller for controlling the water supply pump according to a signal from the flow sensor.

14. (original) The ice making machine according to claim 13, further including a water supply valve provided between the water supply pump and the feed water receptacle to selectively block the flow of water which is being supplied from the feed water receptacle.

15. (original) The ice making machine according to claim 11, further including a water purifier provided between the freezing unit and the feed water receptacle.

16. (original) The ice making machine according to claim 15, further including a sterilizing light provided on the water flowing path between the freezing unit and the water purifier.

17. (original) The ice making machine according to claim 11, wherein said freezing unit includes:

an evaporation tube connected to the cooling system;

a base frame having a plurality of freezing cells to be filled with water and pivotably mounted in the main body;

a freezing plate having freezing fingers for dipping into the water supplied to the freezing cells to form ice pieces therearound; and

a drain leading path formed at one side of the base frame,

said base frame being capable of pivoting and tilting to one side so that water remaining unfrozen in the freezing cells can be discharged to the drain receptacle along the drain leading path.

18. (original) The ice making machine according to claim 17, providing a drain leading means at one side of the ice bin to receive water flowing along the drain leading path and delivering the water to the drain receptacle.

19. (original) The ice making machine according to claim 18, wherein said drain leading means includes a tube section connected to the drain receptacle and an diverging section for leading the water flowing down from the drain leading member to the tube section.

20. (original) The ice making machine according to claim 11, wherein said ice bin has a connection pipe therein to be connected to the drain receptacle so that the water melted in the ice bin can flow into the drain receptacle through the connection pipe.